

Appendix table 5-31.

Academic employment of doctoral scientists and engineers, by degree field, race/ethnicity, and type of position: 1973–99
(Thousands)

Field of degree and race/ethnicity	1973	1975	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997	1999
Total academic employment														
All, total S&E	118.0	134.1	145.4	155.3	167.1	176.1	190.2	195.9	206.6	210.6	213.8	217.5	232.5	240.2
Total sciences	105.6	120.6	130.7	139.5	150.9	157.9	170.3	174.7	183.8	187.8	190.6	193.7	205.9	214.7
Physical sciences	22.1	23.6	25.0	24.6	25.3	25.1	27.0	27.2	27.7	27.7	28.6	29.4	30.2	30.9
Mathematics	9.7	11.0	11.7	12.2	12.4	12.9	13.6	13.8	14.5	15.2	15.5	14.6	15.6	15.2
Computer sciences	0.0	0.0	0.0	0.1	0.3	0.5	0.8	1.1	1.5	2.0	2.5	3.1	3.3	3.7
Environmental sciences	3.4	3.9	4.2	4.2	4.6	4.8	5.2	5.6	5.9	6.1	6.4	6.4	7.3	7.8
Life sciences	34.9	39.4	42.6	47.0	51.3	54.8	58.7	61.2	64.8	66.9	68.2	71.6	77.3	81.9
Psychology	12.2	14.8	16.2	17.7	20.1	21.0	23.1	23.7	25.0	25.2	25.0	26.1	27.3	29.0
Social sciences	23.4	28.0	31.1	33.6	36.9	38.8	41.9	42.1	44.5	44.8	44.4	42.5	44.9	46.2
Engineering	12.4	13.4	14.8	15.8	16.1	18.1	19.9	21.2	22.8	22.8	23.1	23.8	26.6	25.5
White, total S&E	107.7	121.6	131.4	140.0	149.9	157.2	168.4	172.8	181.0	183.5	181.8	182.6	193.2	198.2
Total sciences	96.9	109.9	118.8	126.5	135.9	142.0	152.0	155.7	163.0	165.3	164.3	165.0	173.0	178.8
Physical sciences	19.7	21.1	22.1	21.9	22.3	21.9	23.4	23.3	23.7	23.8	23.4	23.8	24.4	25.3
Mathematics	8.8	10.0	10.6	10.8	11.0	11.5	11.9	12.2	12.6	13.0	12.9	12.0	12.6	12.3
Computer sciences	0.0	0.0	0.0	0.1	0.2	0.4	0.6	0.9	1.1	1.4	1.6	2.1	2.2	2.7
Environmental sciences	3.3	3.7	4.0	4.0	4.3	4.5	4.9	5.2	5.5	5.7	5.9	5.7	6.6	7.0
Life sciences	32.1	35.8	38.8	42.4	46.1	49.3	52.7	54.6	57.6	59.2	59.1	61.3	64.9	67.2
Psychology	11.6	13.9	15.2	16.8	18.8	19.6	21.3	22.0	23.2	23.2	22.9	23.6	24.4	25.5
Social sciences	21.4	25.3	28.2	30.5	33.1	34.7	37.2	37.5	39.4	39.1	38.6	36.5	38.0	38.9
Engineering	10.8	11.6	12.6	13.5	14.0	15.2	16.4	17.2	18.1	18.2	17.5	17.6	20.2	19.4
Asian/Pacific Islander, total S&E	5.0	6.1	6.7	9.8	10.8	11.8	14.0	15.0	16.3	16.8	20.9	22.4	25.4	26.3
Total sciences	4.0	5.0	5.4	7.8	9.1	9.4	11.1	11.5	12.2	13.1	16.2	17.5	20.3	21.7
Physical sciences	1.1	1.3	1.4	1.8	2.0	2.2	2.6	2.9	2.8	2.6	3.8	4.1	4.1	4.0
Mathematics	0.4	0.5	0.5	0.9	0.9	1.0	1.1	1.1	1.3	1.6	1.9	1.8	2.2	2.1
Computer sciences	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.3	0.5	0.7	0.9	0.9	0.9
Environmental sciences	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.3	0.2	0.4	0.5	0.5	0.5	0.6
Life sciences	1.3	1.8	2.0	3.1	3.6	3.6	4.0	4.4	4.7	5.1	6.3	6.8	8.5	9.9
Psychology	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.7	0.8
Social sciences	1.0	1.1	1.2	1.6	2.0	2.0	2.5	2.2	2.4	2.6	2.7	2.8	3.2	3.5
Engineering	1.1	1.1	1.3	1.9	1.8	2.4	3.0	3.5	4.1	3.7	4.7	4.9	5.2	4.6
Underrepresented minorities, total S&E	2.4	3.2	3.7	4.9	5.8	6.5	7.2	7.8	9.0	9.9	10.7	12.4	13.7	15.6
Total sciences	2.2	2.9	3.4	4.5	5.5	6.0	6.7	7.2	8.3	9.0	9.8	11.2	12.6	14.1
Physical sciences	0.5	0.5	0.5	0.7	0.9	0.9	0.9	1.0	1.1	1.2	1.4	1.4	1.7	1.6
Mathematics	0.2	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.5	0.7	0.8	0.7	0.8
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.2
Environmental sciences	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Life sciences	0.8	1.1	1.2	1.3	1.5	1.7	1.8	2.1	2.4	2.6	2.7	3.5	3.9	4.7
Psychology	0.3	0.4	0.6	0.5	0.8	1.0	1.2	1.2	1.3	1.5	1.6	2.0	2.3	2.7
Social sciences	0.5	0.8	0.8	1.5	1.8	2.0	2.1	2.3	2.8	3.0	3.1	3.2	3.6	3.9
Engineering	0.2	0.2	0.3	0.4	0.3	0.5	0.5	0.5	0.7	0.9	0.9	1.2	1.2	1.5
Black, total S&E	1.3	1.7	1.7	1.9	2.6	3.1	3.3	3.5	3.8	4.6	4.8	5.8	6.6	7.3
Total sciences	1.2	1.6	1.7	1.9	2.5	2.9	3.2	3.3	3.5	4.2	4.5	5.4	6.1	6.6
Physical sciences	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.5	0.5	0.7	0.6
Mathematics	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Life sciences	0.4	0.6	0.6	0.6	0.6	0.8	0.9	0.9	1.0	1.2	1.3	1.7	1.9	2.1
Psychology	0.2	0.2	0.3	0.3	0.4	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.2	1.4
Social sciences	0.3	0.5	0.5	0.7	1.0	1.1	1.3	1.2	1.2	1.6	1.7	2.0	2.2	2.0
Engineering	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.4	0.3	0.5	0.5	0.7

See explanatory notes, if any, and SOURCE at end of table.

Appendix table 5-31.

Academic employment of doctoral scientists and engineers, by degree field, race/ethnicity, and type of position: 1973-99

(Thousands)

Field of degree and race/ethnicity	1973	1975	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997	1999
Hispanic, total S&E	0.9	1.2	1.6	2.4	2.5	2.6	3.1	3.4	4.3	4.5	5.0	5.7	6.2	7.3
Total sciences	0.8	1.1	1.4	2.1	2.4	2.4	2.8	3.1	3.9	4.1	4.4	5.0	5.6	6.6
Physical sciences	0.2	0.2	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.8	0.8	0.8	0.9	0.8
Mathematics	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.4	0.5
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1
Environmental sciences	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Life sciences	0.4	0.4	0.5	0.7	0.8	0.8	0.8	1.0	1.2	1.2	1.3	1.6	1.8	2.3
Psychology	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.8	1.0	1.1
Social sciences	0.1	0.2	0.2	0.6	0.5	0.6	0.7	0.8	1.1	1.1	1.2	1.1	1.3	1.6
Engineering	0.1	0.1	0.2	0.3	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.7	0.6	0.7
American Indian/Alaskan Native, total S&E	0.2	0.3	0.4	0.6	0.7	0.7	0.8	0.8	1.0	0.8	0.9	0.9	0.9	1.0
Total sciences	0.2	0.3	0.3	0.6	0.7	0.7	0.7	0.8	0.9	0.8	0.9	0.8	0.8	0.9
Physical sciences	0.0	0.1	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2
Mathematics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life sciences	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Psychology	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Social sciences	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.3	0.5	0.3	0.4	0.3	0.3	0.3
Engineering	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Full-time faculty														
All, total S&E	103.3	116.4	125.6	131.2	141.9	148.4	156.9	164.4	169.8	173.1	172.4	171.4	178.4	184.0
Total sciences	92.0	104.2	112.2	116.9	127.2	132.0	139.0	145.1	149.5	153.1	152.2	151.3	156.8	163.0
Physical sciences	17.8	18.9	20.0	20.0	20.5	20.2	21.2	22.0	21.5	21.7	21.3	20.9	21.4	21.7
Mathematics	9.3	10.4	10.9	11.4	11.7	12.3	12.7	12.9	13.5	14.2	14.7	13.0	13.6	13.1
Computer sciences	0.0	0.0	0.0	0.1	0.3	0.4	0.7	0.9	1.3	1.8	2.3	2.8	3.0	3.3
Environmental sciences	3.0	3.4	3.6	3.5	3.8	4.0	4.2	4.4	4.7	4.5	4.5	4.7	5.1	5.6
Life sciences	29.5	33.1	34.9	37.3	40.9	43.5	45.6	48.1	49.3	51.1	50.8	52.8	55.2	58.1
Psychology	10.8	12.8	13.9	14.3	16.4	17.3	18.5	19.2	20.2	20.7	19.5	20.1	20.8	21.9
Social sciences	21.6	25.5	28.8	30.3	33.7	34.4	36.1	37.6	39.0	39.0	39.2	37.1	37.7	39.2
Engineering	11.3	12.2	13.5	14.3	14.7	16.4	17.9	19.3	20.2	20.1	20.1	20.0	21.5	21.1
White, total S&E	94.9	106.2	114.3	118.7	128.1	133.4	139.7	146.2	149.8	151.8	148.7	147.1	151.1	155.4
Total sciences	84.9	95.6	102.6	106.5	115.4	119.4	124.9	130.3	133.6	135.7	133.1	131.7	134.5	139.3
Physical sciences	16.1	17.2	18.0	18.0	18.5	17.8	18.8	19.3	18.9	18.9	18.0	17.8	17.9	18.3
Mathematics	8.5	9.5	9.9	10.1	10.3	10.9	11.1	11.4	11.7	12.2	12.3	10.7	11.0	10.7
Computer sciences	0.0	0.0	0.0	0.2	0.3	0.5	0.7	1.0	1.3	1.5	1.9	2.0	2.4	
Environmental sciences	2.9	3.3	3.5	3.3	3.6	3.8	4.0	4.1	4.4	4.3	4.2	4.3	4.7	5.1
Life sciences	27.5	30.4	32.1	33.9	37.2	39.7	41.3	43.3	44.4	46.0	45.1	46.7	48.3	50.2
Psychology	10.3	12.1	13.0	13.6	15.4	16.2	17.1	17.9	18.8	19.2	18.0	18.4	18.8	19.6
Social sciences	19.7	23.2	26.1	27.5	30.1	30.7	32.2	33.5	34.4	33.8	34.1	31.9	31.8	33.0
Engineering	10.0	10.6	11.6	12.2	12.7	14.0	14.8	15.9	16.2	16.2	15.6	15.3	16.7	16.1
Asian/Pacific Islander, total S&E	4.0	4.7	5.0	7.8	8.4	9.1	10.9	11.7	12.3	12.6	14.8	14.5	16.5	17.0
Total sciences	3.0	3.7	3.9	6.0	6.7	7.2	8.2	8.7	8.9	9.5	11.1	10.9	12.7	13.2
Physical sciences	0.7	0.8	0.9	1.3	1.2	1.5	1.6	1.8	1.7	1.7	2.2	2.0	2.2	2.2
Mathematics	0.4	0.5	0.5	0.8	0.9	1.0	1.1	1.1	1.3	1.5	1.7	1.6	2.0	1.7
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.5	0.7	0.8	0.8	0.8
Environmental sciences	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.3	0.2	0.3
Life sciences	0.9	1.2	1.2	2.1	2.3	2.4	2.8	3.1	3.0	3.0	3.7	3.5	4.1	4.9
Psychology	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5
Social sciences	0.9	1.1	1.1	1.5	1.9	1.9	2.1	2.1	2.1	2.4	2.3	2.4	2.8	2.9
Engineering	0.9	1.0	1.1	1.8	1.7	1.9	2.7	3.0	3.4	3.1	3.7	3.6	3.8	3.8

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Academic employment of doctoral scientists and engineers, by degree field, race/ethnicity, and type of position: 1973–99

(Thousands)

Field of degree and race/ethnicity	1973	1975	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997	1999
Underrepresented minorities, total S&E	2.0	2.7	3.2	4.2	5.0	5.4	5.8	6.3	7.4	8.4	8.6	9.8	10.6	11.6
Total sciences	1.9	2.5	2.9	3.9	4.8	5.0	5.4	5.9	6.8	7.6	7.8	8.7	9.6	10.4
Physical sciences	0.4	0.4	0.4	0.6	0.8	0.8	0.7	0.8	0.8	1.0	1.1	1.0	1.3	1.3
Mathematics	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.6	0.7
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
Environmental sciences	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Life sciences	0.7	0.9	1.0	1.1	1.3	1.3	1.4	1.6	1.8	2.0	2.0	2.6	2.7	3.1
Psychology	0.2	0.3	0.5	0.4	0.6	0.7	0.9	0.9	1.0	1.1	1.1	1.3	1.5	1.8
Social sciences	0.4	0.6	0.8	1.4	1.6	1.7	1.8	2.0	2.5	2.8	2.8	2.8	3.1	3.3
Engineering	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.8	0.8	1.1	1.0	1.1
Black, total S&E	1.1	1.4	1.5	1.7	2.3	2.5	2.7	2.8	3.2	4.0	3.8	4.6	5.0	5.5
Total sciences	1.1	1.3	1.5	1.6	2.1	2.3	2.6	2.6	3.0	3.6	3.5	4.2	4.5	4.9
Physical sciences	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.3	0.3	0.3	0.4	0.6	0.5
Mathematics	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life sciences	0.3	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	1.0	1.0	1.3	1.3	1.4
Psychology	0.1	0.2	0.3	0.2	0.4	0.4	0.5	0.5	0.6	0.7	0.6	0.6	0.7	1.0
Social sciences	0.3	0.4	0.4	0.6	0.9	0.9	1.1	1.0	1.1	1.5	1.4	1.5	1.7	1.7
Engineering	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.2	0.2	0.3	0.3	0.5	0.4	0.6
Hispanic, total S&E	0.7	1.0	1.3	2.0	2.1	2.2	2.4	2.7	3.3	3.7	3.9	4.4	4.8	5.2
Total sciences	0.6	0.9	1.2	1.7	2.0	2.0	2.2	2.5	3.0	3.3	3.5	3.8	4.3	4.7
Physical sciences	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.5	0.4	0.6	0.6	0.5	0.7	0.7
Mathematics	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.5
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1
Environmental sciences	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Life sciences	0.3	0.4	0.4	0.5	0.7	0.6	0.6	0.8	0.9	0.9	0.9	1.2	1.3	1.5
Psychology	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.5	0.7	0.7
Social sciences	0.1	0.2	0.2	0.5	0.5	0.5	0.7	0.9	1.0	1.0	1.0	1.1	1.1	1.3
Engineering	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.6	0.5	0.5
American Indian/Alaskan Native, total S&E	0.2	0.3	0.4	0.6	0.6	0.7	0.7	0.8	0.9	0.8	0.8	0.8	0.8	0.8
Total sciences	0.2	0.3	0.3	0.6	0.6	0.6	0.6	0.7	0.8	0.7	0.8	0.7	0.7	0.7
Physical sciences	0.0	0.1	0.0	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Mathematics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life sciences	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Psychology	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Social sciences	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.2
Engineering	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1
Postdoctorate positions														
All, total S&E	4.2	6.2	7.6	8.1	8.5	8.3	8.7	9.3	11.5	9.9	13.3	16.8	18.9	18.5
Total sciences	4.0	5.9	7.2	7.8	8.4	8.0	8.5	8.8	10.9	9.4	12.3	15.6	17.2	17.5
Physical sciences	1.7	2.1	2.2	1.9	1.9	1.4	1.9	2.0	2.4	1.9	3.0	3.9	3.2	2.9
Mathematics	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.0	0.5	0.5	0.6
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Environmental sciences	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.5	0.5	0.6	0.5
Life sciences	1.9	3.0	4.0	4.7	5.2	5.1	5.2	5.6	6.8	6.4	8.2	9.2	10.8	11.7
Psychology	0.2	0.4	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.5	0.4	1.1	1.3	1.2
Social sciences	0.1	0.2	0.3	0.3	0.3	0.6	0.3	0.1	0.4	0.3	0.2	0.4	0.7	0.5
Engineering	0.2	0.3	0.4	0.3	0.2	0.3	0.2	0.5	0.6	0.5	1.0	1.2	1.7	1.1

See explanatory notes, if any, and SOURCE at end of table.

Appendix table 5-31.

Academic employment of doctoral scientists and engineers, by degree field, race/ethnicity, and type of position: 1973–99

(Thousands)

Field of degree and race/ethnicity	1973	1975	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997	1999
White, total S&E	3.6	5.0	6.2	6.8	6.9	6.8	7.1	7.4	9.0	7.1	9.1	11.2	12.5	11.9
Total sciences	3.4	4.8	6.0	6.7	6.7	6.8	7.0	7.2	8.7	6.9	8.8	10.7	11.6	11.2
Physical sciences	1.4	1.7	1.7	1.5	1.3	1.2	1.3	1.3	1.6	1.2	2.0	2.3	2.0	1.8
Mathematics	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.3	0.3	0.5
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Environmental sciences	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.4	0.3	0.5	0.5
Life sciences	1.7	2.4	3.3	4.1	4.4	4.3	4.5	4.7	5.6	4.8	5.9	6.5	7.0	7.2
Psychology	0.1	0.4	0.4	0.6	0.6	0.5	0.7	0.6	0.8	0.4	0.3	0.9	1.1	0.9
Social sciences	0.1	0.2	0.3	0.3	0.3	0.5	0.3	0.1	0.3	0.2	0.1	0.3	0.6	0.3
Engineering	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.2	0.3	0.5	0.9	0.7
Asian/Pacific Islander, total S&E	0.5	1.0	1.1	1.1	1.4	1.1	1.1	1.6	1.9	2.3	3.6	4.7	5.3	5.2
Total sciences	0.4	0.9	1.0	1.0	1.4	0.9	1.1	1.3	1.6	2.0	2.9	4.0	4.7	4.9
Physical sciences	0.2	0.4	0.4	0.4	0.6	0.2	0.5	0.6	0.7	0.6	0.9	1.4	1.1	1.1
Mathematics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Life sciences	0.2	0.5	0.5	0.5	0.8	0.6	0.6	0.6	0.9	1.3	1.9	2.2	3.2	3.6
Psychology	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Social sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Engineering	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.3	0.7	0.7	0.7	0.2
Underrepresented minorities, total S&E	0.1	0.1	0.2	0.2	0.2	0.4	0.4	0.4	0.6	0.4	0.6	0.9	1.1	1.5
Total sciences	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.3	0.5	0.4	0.6	0.9	1.0	1.4
Physical sciences	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
Mathematics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life sciences	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.4	0.5	0.6	0.8
Psychology	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.2
Social sciences	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Engineering	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
Black, total S&E	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.3	0.5	0.5
Total sciences	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.3	0.5	0.5
Physical sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mathematics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life sciences	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.3
Psychology	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Social sciences	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Hispanic, total S&E	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.4	0.3	0.4	0.6	0.5	0.9
Total sciences	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.3	0.4	0.6	0.5	0.8
Physical sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1
Mathematics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life sciences	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.5
Psychology	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1
Social sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Engineering	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

See explanatory notes, if any, and SOURCE at end of table.

Appendix table 5-31.

Academic employment of doctoral scientists and engineers, by degree field, race/ethnicity, and type of position: 1973–99

(Thousands)

Field of degree and race/ethnicity	1973	1975	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997	1999
American Indian/Alaskan Native, total S&E														
Total sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Physical sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Mathematics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Psychology	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Social sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full-time nonfaculty and part-time positions														
All, total S&E														
Total sciences	10.5	11.5	12.2	15.9	16.6	19.4	24.6	22.1	25.4	27.6	28.1	29.4	35.3	37.5
Physical sciences	9.6	10.5	11.3	14.8	15.3	18.0	22.8	20.7	23.3	25.4	26	26.8	31.9	34.2
Mathematics	2.6	2.5	2.7	2.7	3.0	3.5	3.9	3.3	3.8	4.2	4.4	4.5	5.6	6.3
Computer sciences	0.4	0.6	0.7	0.7	0.6	0.5	0.7	0.6	0.8	0.9	0.8	1.1	1.5	1.5
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.3
Life sciences	0.3	0.4	0.4	0.6	0.6	0.7	0.9	0.9	0.9	1.2	1.4	1.3	1.6	1.7
Psychology	3.4	3.3	3.7	5.0	5.2	6.3	7.8	7.6	8.7	9.5	9.2	9.6	11.3	12.0
Social sciences	1.2	1.5	1.8	2.8	3.0	3.1	3.9	3.8	4.0	4.0	5.1	5.0	5.2	5.9
Engineering	1.6	2.2	1.9	2.9	2.9	3.8	5.5	4.3	5.1	5.5	5.0	5.0	6.5	6.5
White non-Hispanic, total S&E														
Total sciences	9.3	10.4	10.9	14.5	15.0	17.0	21.6	19.3	22.2	24.6	24.0	24.3	29.6	31.0
Physical sciences	8.6	9.5	10.1	13.4	13.7	15.8	20.0	18.2	20.6	22.8	22.4	22.5	27.0	28.3
Mathematics	2.2	2.3	2.4	2.5	2.6	3.0	3.3	2.7	3.2	3.6	3.5	3.7	4.4	5.2
Computer sciences	0.3	0.5	0.6	0.6	0.6	0.5	0.7	0.6	0.7	0.8	0.6	0.9	1.2	1.1
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2
Life sciences	0.3	0.4	0.4	0.6	0.6	0.6	0.8	0.9	0.8	1.2	1.3	1.1	1.5	1.4
Psychology	3.0	2.9	3.3	4.4	4.5	5.3	6.9	6.6	7.5	8.4	8.1	8.1	9.5	9.8
Social sciences	1.1	1.5	1.7	2.6	2.8	2.9	3.5	3.5	3.6	3.6	4.5	4.3	4.5	5.0
Engineering	1.5	2.0	1.7	2.7	2.7	3.5	4.7	3.9	4.7	5.1	4.4	4.3	5.6	5.5
Asian/Pacific Islander, total S&E														
Total sciences	0.6	0.4	0.6	0.9	1.0	1.6	2.0	1.8	2.0	1.9	2.5	3.2	3.6	4.1
Physical sciences	0.5	0.4	0.5	0.9	1.0	1.4	1.8	1.5	1.7	1.5	2.2	2.6	2.9	3.5
Mathematics	0.2	0.1	0.1	0.2	0.2	0.5	0.5	0.5	0.5	0.4	0.7	0.7	0.9	0.8
Computer sciences	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.2
Life sciences	0.2	0.1	0.3	0.4	0.6	0.7	0.7	0.7	0.9	0.8	0.8	1.1	1.2	1.5
Psychology	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Social sciences	0.0	0.1	0.1	0.1	0.1	0.1	0.4	0.2	0.2	0.2	0.3	0.3	0.4	0.5
Engineering	0.1	0.0	0.1	0.1	0.0	0.2	0.2	0.3	0.4	0.3	0.3	0.6	0.6	0.6
Underrepresented minorities, total S&E														
Total sciences	0.3	0.4	0.3	0.5	0.5	0.8	1.0	1.1	1.1	1.1	1.5	1.8	2.1	2.5
Physical sciences	0.3	0.4	0.3	0.4	0.5	0.7	0.9	1.0	1.0	1.0	1.4	1.7	2.0	2.4
Mathematics	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.3
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life sciences	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.6	0.8
Psychology	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.6	0.6	0.7
Social sciences	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.5	0.5
Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2

See explanatory notes, if any, and SOURCE at end of table.

Appendix table 5-31.

Academic employment of doctoral scientists and engineers, by degree field, race/ethnicity, and type of position: 1973–99
 (Thousands)

Field of degree and race/ethnicity	1973	1975	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997	1999
Black, total S&E	0.2	0.2	0.2	0.2	0.3	0.5	0.4	0.6	0.4	0.5	0.7	0.9	1.2	1.2
Total sciences	0.2	0.2	0.2	0.2	0.3	0.5	0.4	0.6	0.4	0.5	0.7	0.9	1.1	1.2
Physical sciences	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1
Mathematics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life sciences	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.3	0.4
Psychology	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.3	0.4	0.4	0.3
Social sciences	0.0	0.1	0.0	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.3	0.3
Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hispanic, total S&E	0.1	0.1	0.2	0.2	0.3	0.3	0.5	0.5	0.6	0.5	0.7	0.7	0.8	1.2
Total sciences	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.8	1.1
Physical sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Mathematics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life sciences	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.3	0.3
Psychology	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3
Social sciences	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.1
American Indian/Alaskan Native,														
total S&E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1
Physical sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mathematics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Computer sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Environmental sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Psychology	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Social sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NA = not available

NOTES: Data exclude university-managed federally funded research and development centers. Because of survey coverage, data also exclude scientists and engineers with doctorates from foreign institutions. Faculty positions include full, associate, and assistant professors and instructors. Respondents with unknown racial/ethnic classification or faculty status are excluded. Underrepresented minorities are black, Hispanic, and American Indian/Alaskan Native, respondents. Details may not add to totals because of rounding.

SOURCE: National Science Foundation, Division of Science Resources Statistics (NSF/SRS), Survey of Doctorate Recipients, unpublished tabulations.

See figure 5-26.

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